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1 Routine/Function Prologues

1.0.1 glbprecip_cmap.F90 (Source File: glbprecip_cmap.F90)

Includes reading routines for global CMAP precipitation product Used instead of GDAS/GEOS precipitation forcing

REVISION HISTORY:

17 Jul 2001: Jon Gottschalck; Initial code
 04 Feb 2002: Jon Gottschalck; Added necessary code to use global precip observations with domain 3 (2x2.5)
 30 Jul 2002: Jon Gottschalck; Added code to use Huffman and Persiann precip data

INTERFACE:

```
subroutine glbprecip_cmap( fname, ferror_cmap, filehr)
```

USES:

```
use lisdrv_module, only : lis, gindex
use obsprecipforcing_module, only: obsprecip
use cmapdomain_module, only : cmapdrv
implicit none
```

ARGUMENTS:

```
character(len=80)  :: fname           ! Filename variable for datafile
integer            :: ferror_cmap
integer            :: filehr
```

CONTENTS:

```
allocate (precip_regrid(lis%d%lnc,lis%d%lnr))
precip_regrid = -1.0
!-----
! Set necessary parameters for call to interp_gdas
!-----
ism      = 0
undef    = lis%d%undef
jj       = 0
if (mod((filehr),12).eq.0) then
  lugb=25
else
  lugb=26
endif
ncmap = cmapdrv%ncold*cmapdrv%nroid
allocate(cmapin(ncmap))
allocate(lb(ncmap))
lugi    = 0
jpds    = -1
jpds(5) = 59
```

```
jpds(6) = 1
jpds(7) = 0
jgds    = 0
call baopen (lugb,fname,iret)
if (iret == 0 ) then
call getgb (lugb,lugi,nmap,jj,jpds,jgds,kf,k,kpds,kgdscmap,lb,cmapin,iret)
call interp_cmap(kpds,kgdscmap,nmap,cmapin,lb,lis%d%kgds, &
lis%d%lnc,lis%d%lnr,precip_regrid)

do j = 1,lis%d%lnr
do i = 1,lis%d%lnc
if(precip_regrid(i,j) .eq. -1) then
print*, j,i,precip_regrid(i,j)
endif
if (precip_regrid(i,j) .ne. -1.0) then
index = gindex(i,j)
if(index .ne. -1) then
obsprecip(index) = precip_regrid(i,j)*3600.0
endif
endif
enddo
enddo

call baclose (lugb,jret)

ferror_cmap = 1
close(10)
print*, "Obtained CMAP CPC precipitation data ", fname
else
print*, "Missing CMAP CPC precipitation data ", fname
ferror_cmap = 0
endif
deallocate (precip_regrid)
deallocate(lb)
deallocate(cmapin)
```